WHAT IS CLAIMED IS:

1. A fine granularity scalability encoding apparatus, comprising:

a first quantizer whch performs a DCT on a motion-compensated image and quantizes a resulting value;

a second quantizer which re-quantizes the value obtained by the first quantizer;

an inverse-quantizer which re-quantizes a value re-quantized by the second quantizer;

a first subtracter which obtains a difference between a value of N times the re-quantized value and the inverse-quantized value;

a second subtracter which obtains a difference between the value quantized by the first quantizer and the value quantized by the inverse-quantizer; and

a third subtracter which subtracts an output value of the first subtracter from an output value of the second subtracter.

2. The apparatus of claim 1, further comprising:

a bit plane shifting unit which performs bit plane shifting if a block with a good picture quality is required.

3. The apparatus of claim 1, further comprising:

a maximum value calculating unit which searches a maximum value from output values of the third subtracter; and

a bit plane variable length coding unit which performs variable length coding on the obtained maximum value by bit planes.

4. A fine granularity scalability encoding apparatus, comprising:

A process of which calculates a quantization error based on a difference between a signal prior to quantization and a decision level of a quantizer, said processor not coding sign information during encoding in an enhancement layer.

5. A fine granularity scalability encoding apparatus, comprising:

a first quantizer which performs a DCT on a motion-compensated image and quantizing a resulting value;

a second quantizer which re-quantizes the value obtained by the first quantizer;

an inverse-quantizer which re-quantizes a value re-quantized by the second quantizer;

re-inverse-quantizer which re-inversely quantizes the value inversely quantized by the inverse-quantizer; and

a subtracter which obtains a difference between the value quantized by the first quantizer and a value equal to N times the value quantized by the second quantizer.

6. The apparatus of claim 5, further comprising:

a bit plane shifting unit which performs a bit plane shift if a block with a good picture quality is necessary.

7. The apparatus of claim 5, further comprising:

a maximum value calculating unit which searches a maximum value from output values of the third subtracter; and

a bit plane variable length coding unit which performs variable length coding on the obtained maximum value by bit planes.

8. A fine granularity scalability decoding apparatus, comprising:

a bit plane variable length decoding (VLD) unit which performs variable-length decoding of an enhancement layer bit stream by bit planes;

an adding/subtracting unit which adds/subtracts a difference value between the variable length decoded value of each bit plane and an image reproduced in the base layer;

an inverse-quantizer which inversely quantizes the added/subtracted value;

an inverse discrete cosine transforming unit which restores an image transmitted from the enhancement layer by performing an inverse discrete cosine transforming (IDCT) on the inversely quantized value by block units; and

a clipping unit which restores an enhanced image by clipping the inverse discrete cosine transformed image values in the range of 0 ~ 255.

9. The apparatus of claim 8, wherein the adding/subtracting unit comprising:

a fifth subtracter which obtains a difference value (Δk) between a value equal to N times the value obtained by variable length decoding the bit stream of the base layer and a value obtained by inversely quantizing the variable length decoded value;

a sixth subtracter which obtains a difference value between the value obtained by the fifth subtracter and the bit plane variable length decoded value; and

a seventh subtracter which obtains a difference value between a value obtained by the sixth subtracter and the value inversely quantized by the inverse-quantizer.

10. A fine granularity scalability encoding method, comprising:

quantizing a value obtained by performing a discrete cosine transforming on a motion-compensated image;

re-quantizing the quantized value;

inverse-quantizing the re-quantized value;

obtaining a difference between a value of N times the re-quantized value and the inverse-quantized value;

obtaining a difference between the first-quantized value and the inverse-quantized value; and

subtracting output values obtained in the obtaining steps.

11. The method of claim 10, further comprising:

finding a maximum value from output values obtained in the subtracting step; and

performing variable length coding on the calculated maximum value by bit planes.

12. A fine granularity scalability encoding method, comprising:

quantizing a value obtained by performing a discrete cosine transforming on a motion-compensated image;

re-quantizing the quantized value;

inversely quantizing the re-quantized value;

inversely quantizing the inversely quantized value;

obtaining a difference between the first-quantized value and a value equal to N times the requantized value.

13. The method of claim 12, further comprising:

finding a maximum value from the output values obtained in the obtaining step; and

performing variable length coding on the calculated maximum value by bit planes.

14. A fine granularity scalability decoding method comprising:

variable-length decoding an enhancement layer bit stream by bit planes;

adding/subtracting a difference value between the variable length decoded value of each bit plane and an image reproduced in a base layer;

inversely quantizing the added/subtracted value;

restoring an image transmitted from the enhancement layer by performing an inverse discrete cosine transforming (IDCT) on the inversely quantized value by block units; and

restoring an enhanced image by clipping the inverse discrete cosine transformed image values in the range of 0 ~ 255.

15. The method of claim 14, wherein the step of adding/subtracting comprises:

obtaining a difference value between a value equal to N times the value obtained by variable length decoding the bit stream of the base layer and the value obtained by inversely quantizing the variable length decoded value;

obtaining a difference value between the value obtained by the first obtaining step and the bit plane variable length decoded value; and

obtaining a difference value between the value obtained in the second obtaining step and the inversely quantized value.